

Amendment to the Claims:

1. (Cancelled)

2. (Currently Amended) [[The]] A vacuum pump of claim 1,
comprising:

a pump unit with a vacuum pumping set,

an operating unit connected with the pump unit for controlling the

5 pump unit and arranged spaced from the pump unit, and

transceiver modules in the pump unit and the operating unit,
respectively, for transmitting and receiving control and operational data
bidirectionally in a wireless manner, the pump unit and the operating unit being
exclusively connected with each other in a wireless manner,

10 wherein the pump unit comprises:

a pump control and a supervisory module for
continuous supervision of the transceiver module even if no control or
operational data at all are exchanged between the pump unit and the
operating unit,

15 the supervisory module regularly inducing the
transceiver module at intervals of a few seconds at maximum to emit a
presence signal,

20 the pump control switching the pumping set to a safety
mode when the supervisory module signals an interruption of the
reception of a control signal continuously transmitted by the
transceiver module of the operating unit.

3. (Previously Presented) The vacuum pump of claim 2,
wherein the operating unit comprises:

5 a supervisory module continuously supervising the reception of the
transceiver module and continuously inducing the transmission of the control signal to
the pump unit when a fault-free reception is detected.

4. (Currently Amended) The vacuum pump of ~~claim 1-claim 2~~, wherein the transceiver modules include radio modules via which a radio link between the pump unit and the operating unit is established.

5. (Currently Amended) The vacuum pump of ~~claim 1-claim 2~~, wherein the transceiver modules are infrared modules via which an infrared link between the pump unit and the operating unit is established.

6. (Currently Amended) The vacuum pump of ~~claim 1-claim 2~~, wherein at least one of the pump unit and the operating unit includes a wireless telephone module.

7. (Currently Amended) The vacuum pump of ~~claim 1-claim 2~~, wherein at least one of the pump unit and the operating unit includes a position determination module.

8. (Withdrawn) A method for controlling a vacuum pump comprising a pump unit with a pumping set and an operating unit arranged spaced from the pump unit, the pump unit and the operating unit being connected with each other bidirectionally and exclusively in a wireless manner, the method comprising the
5 steps of:

continuously transmitting signals from the pump unit to the operating unit and vice versa,

10 continuously supervising the reception of the operating unit signals in the pump unit and of the pump unit signals in the operating unit, and

operating the pumping set in a safety mode when an interruption of the continuous reception in at least one of the pump unit and the operating unit is detected.

9. (Withdrawn) The method of claim 8, further including:
continuously transmitting a control signal from the
operating unit to the pump unit as long as a fault-free reception in the
operating unit is detected,

5 continuously supervising the reception of the control
signal in the pump unit, and
operating the pumping set in a safety mode when no
control signal is received.

10. (Withdrawn) A vacuum pump system which performs the
method of claim 8.

11. (Currently Amended) A vacuum pump comprising:
a) a plurality of vacuum pump units, each vacuum pump unit
including:

5 a vacuum pump,
an electronic vacuum pump control module for
controlling operation of the vacuum pump,
a transceiver module for receiving control signals from
a control unit and for sending the information signals wirelessly from
the vacuum pump control module to the control unit;

10 b) an operating unit including:
[[a]] the control unit for controlling which controls the
plurality of vacuum pump units,
a manual input system through which instructions are
entered into the control unit,
15 a display, and
a transceiver module which (a) sends wireless control
signals to each of the plurality of vacuum pump units, (b) at regular
intervals, sends signals in addition to the control signals to induce each
of the plurality of vacuum pump units to emit a presence signal, [[and]]

20 (c) receives wireless information signals therefrom from each of the plurality of pump units, and (d) receives presence signals different from the information signals from each of the plurality of pump units.

12. (Previously Presented) The vacuum pump of claim 11, further including:

5 a supervisory module connected with the control module of at least one of the central control unit control module and the vacuum pump control module for causing the vacuum pump to enter a safety mode in response to an interruption in communications between the central control unit and the vacuum pump unit.

13. (Previously Presented) The vacuum pump of claim 11, wherein the control unit further includes:

a telephone module for sending maintenance and control data from the operating unit to a maintenance center.

14. (Previously Presented) The vacuum pump of claim 13, wherein the telephone module operates under one of a GSM, HDCSD, GPRS, or UMTS standard and the central control unit and vacuum pumping unit transceiver modules operate according to one of a Blue Tooth and a wireless LAN IEEE 802.11 standard.

15. (Previously Presented) The vacuum pump of claim 11, wherein each vacuum pump unit further includes:

5 a GPS module which determines a location of the vacuum pumping unit, the GPS module being connected with the vacuum pump control module for communicating vacuum pumping unit position information to the central control unit.